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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,366	07/03/2001	Gennaro A. Cuomo	RSW920000184US1	1082

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EXAMINER

TO, JENNIFER N

ART UNIT	PAPER NUMBER
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2127

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/898,366

Applicant(s)

CUOMO ET AL.

Examiner

Jennifer N. To

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07/03/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07/03/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-24 are present for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter in which the applicant regards as his invention.

2. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following terms lacks antecedent basis:

- a. Said application – claims 1, 9, and 17 lines 5.
- b. Said type – claim 2 line 6, claim 10 lines 6-7, claim 18 lines 5-6.
- c. Said plurality of priorities – claim 3 lines 5-6, claim 11 lines 7, and claim 9 lines 6.
- d. Said plurality of queues – claim 4 lines 3-4, claim 12 line 4, and claim 20 lines 3-4.

3. The rejections above are examples of numerous errors that recurred throughout various claims. There are too many errors to list independently. Applicant should consider fixing all these errors in the amendment.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1, 2, 5, 9, 10,13, 17, 18, and 21 are rejected under 35 U.S.C. 102(a) as being unpatentable over Pandey et al (hereafter Pandey) ("Supporting Quality Service in HTTP Servers", June 1998).

5. As per claims 1 and 9, Pandey teaches the invention as claimed including the step of:

- a. associating a priority with each one of a plurality of different types of HTTP requests that are processed by said application (page 5 , left col., lines 16-23, page 6, left col., lines 25-30); and
- b. processing ones of a plurality of HTTP requests that are associated with a higher priority before processing ones of said plurality of

HTTP requests that are associated with a lower priority (page 3, right col., lines 16-20).

6. As per claims 2 and 10, Pandey further teaches the steps of:
 - a. establishing a plurality of different priorities (page 3, right col., lines 7-8); and
 - b. determining one of said plurality of different priorities associated with said type of each of said plurality of HTTP requests (page 4, right col., lines 48-51).
7. As per claims 5 and 13, Pandey further teaches the steps of:
 - a. receiving said plurality of HTTP requests by said application (page 3, right col., lines 53-59); and
 - b. determining a priority associated with a type of each one of said plurality of HTTP requests (page 4, right col., lines 32-34).
8. As per claim 17, Pandey teaches the invention as claimed including:
 - a. a priority being associated with each one of a plurality of different types of HTTP requests that are processed by said application; and (page 3, right col., lines 25-30); and
 - b. said system including a CPU executing code for processing ones of a plurality of HTTP requests that are associated with a higher priority before processing ones of said plurality of HTTP requests

that are associated with a lower priority (page 6, right col., lines 16-20).

9. As per claim 18, Pandey further teaches the steps of:
 - a. a plurality of different priorities (page 3, right col., lines 7-8); and
 - b. said CPU executing code for determining one of said plurality of different priorities associated with said type of each of said plurality of HTTP requests. (page 4, right col., lines 48-51).
10. As per claim 21, Pandey further teaches the steps of:
 - a. said plurality of HTTP requests being received by said application (page 3, right col., lines 53-59); and
 - b. a priority associated with a type of each one of said plurality of HTTP requests being determined (page 4, right col., lines 32-34).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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12. Claims 3, 4, 6-8, 11, 12, 14-16, 19, 20, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pandey as applied to claims 1 and 9 above, and further in view of Ferguson (U.S. Patent No. 6769019).

13. As per claim 3, Pandey did not specifically teach the step of:

- a. establishing a plurality of different queues; and
- b. associating each one of said plurality of different queues with a different one of said plurality of priorities .

However, Ferguson teaches:

- a. establishing a plurality of different queues (col. 21, lines 45-67); and
- b. associating each one of said plurality of different queues with a different one of said plurality of priorities (col. 17, lines 52-67) .

14. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have combined the teaching of Pandey and Ferguson because Ferguson's queues with associated priority will improve the service time for any request by allocating the request in the prioritize queue that associate with the request.

15. As per claim 4, Ferguson teaches:

- a. storing said plurality of HTTP requests in said plurality of queues (col.11, lines 58-62);

- b. ones of said plurality of HTTP requests that are associated with a first one of said plurality of priorities being stored in a first one of said plurality of queues, wherein said first one of said plurality of queues being associated with said first one of said plurality of priorities (col. 20, lines 59-64); and
- c. ones of said plurality of HTTP requests that are associated with a second one of said plurality of priorities being stored in a second one of said plurality of queues, wherein said second one of said plurality of queues being associated with said second one of said plurality of priorities (col. 20, lines 65-68).

16. As per claim 6, Ferguson teaches:

- a. receiving one of said plurality of HTTP requests by said application (col.12, lines 19-22);
- b. determining whether there is a backlog of pending requests waiting to be processed by said application (col.12, lines 2-3);
- c. in response to a determination that there is no backlog, immediately processing said one of said plurality of HTTP requests (col.12, lines 3-4);
- d. in response to a determination that there is a backlog, determining a type of said one of said plurality of requests (col.12, lines 51-55);
- e. identifying a priority associated with said type (col.12, lines 53-55);

- f. identifying one of a plurality of queues that is associated with said priority (col.12, lines 55-59); and
- g. storing said one of said plurality of requests in said identified one of said plurality of queues (col.11, lines 58-62).

17. As per claim 7, Ferguson teaches:

- a. establishing a plurality of different queues (col. 21, lines 45-67);
- b. associating each one of said plurality of different queues with a different one of a plurality of priorities (col. 17, lines 52-67);
- c. processing requests stored in one of said plurality of queues that is associated with a first priority before processing requests stored in one of said plurality of queues that is associated with a second priority (col.14, lines 11-15).

18. As per claim 15, it is rejected for the same reason as claim 7 above.

19. As per claim 8, Ferguson teaches:

- a. storing ones of said plurality of requests having a type associated with a high priority in one of said plurality of queues that is associated with said high priority (col. 20, lines 59-64);
- b. storing ones of said plurality of requests having a type associated with a low priority in one of said plurality of queues that is associated with said low priority (col. 20, lines 65-68); and

- c. processing said ones of said plurality of requests stored in said one of said plurality of queues that is associated with said high priority before processing said ones of said plurality of requests stored in said one of said plurality of queues that is associated with a low priority (col. 20, lines 11-15).

20. As per claims 11 and 19, they are rejected for the same reason as claim 3 above.

21. As per claim 12, it is rejected for the same reason as claim 4 above.

22. As per claim 14, it is rejected for the same reason as claim 6 above.

23. As per claim 15, it is rejected for the same reason as claim 7 above.

24. As per claim 16, it is rejected for the same reason as claim 8 above.

25. As per claim 20, it is rejected for the same reason as claim 4 above.

26. As per claim 22, it is rejected for the same reason as claim 6 above.

27. As per claim 23, it is rejected for the same reason as claim 7 above.

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28. As per claim 24, it is rejected for the same reason as claim 8 above.

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cherkasova et al (U.S. Patent No. 6546473 B2) teach the steps of determining the priority of documents in a web cache.

Vange et al (U.S. Publication No. 2002/0056006 A1) teach conductor gateway buffer prioritization.

Almeida et al ("Providing Differentiated Levels of Service in Web Content Hosting", Tech. Rep., University of Wisconsin Madison, 1998) teach priority-based request scheduling.

Banga et al ("Resource containers: A new facility for resource management in server system", Tech. Rep., New Orleans, 1999) teach resources containers enable fine-grained resource management in server systems and allow the development of robust servers, with simple and firm control over priority policies.

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer N. To whose telephone number is (571) 272-7212. The examiner can normally be reached on M-T 7AM- 4:30PM, F 7AM- 3:30PM.

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31. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

32. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer N To
Examiner
Art Unit 2127


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SUPERVISORY PATENT EXAMINER
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